



Ada County Annual Strategic Plan

Fiscal Year 2012-2013

Revised annually since 1999

Produced by the Ada County Operations Department

www.adaweb.net

Annual Strategic Plan for Energy Conservation and Resource Use

Fiscal Year 2012-2013

Mission

Implement a program that effectively manages Ada County government's consumption of natural resources and disposal of wastes to enhance the integrity of the environment.

Vision

Over the next year and into the future, Ada County will use cost-effective strategies to meet the demands of an increasing population and higher energy costs. Ada County will continue to develop creative methods for controlling utility costs to save tax dollars and to make energy and resource efficiency a cost-effective part of day-to-day business.

Strategic Initiative

The annual plan provides specific energy-related goals and initiatives for County facilities. The "Energy Plan Partnership" includes not only County personnel, but business partners such as utility representatives, architects, engineers and other local professionals who provide additional input from their unique perspectives to ensure a more comprehensive approach to the plan.

Philosophy

We believe that wisely using resources in public buildings will reduce utility bills while creating a healthy indoor environment for building occupants. We also believe that energy-efficient building design and construction practices, countywide recycling programs,

A five-year action plan establishes the County's goals and objectives to identify cost-effective, economically sustainable energy and resource efficiency priorities for all Ada County facilities.

and the proper disposal of waste within the County will improve the community's environment.

A healthy environment in Ada County is directly related to the efficient use of natural resources via energy-efficient building design and construction, responsible operating practices, and the proper disposal of waste within the County. The Energy Plan Partnership consolidates Ada County's commitment to the environment and provides for public participation in the process.

Issues and Challenges

Following are major issues and challenges affecting the organization, now and in the future. (Not prioritized)

1. Increasing utility costs and reduced dollars available for building projects and programs.
2. Money spent on energy doesn't impact the local economy as much as overall savings.
3. As building systems age, operational costs increase.
4. Population growth increases demands on facilities and drives up maintenance costs.
5. Certain upgrades and equipment change-outs require advanced personnel training.

General Five-Year Goals

These represent broad accomplishments the organization would like to achieve over the next several years. (Not in priority order)

1. Limit, control, and lower utility costs.
2. Limit, control, and lower resource use through recycling.
3. Increase employee involvement in conserving energy and natural resources.
4. Upgrade building systems with energy efficient equipment.
5. Uphold high maintenance standards.
6. Increase the number of facilities with comprehensive, preventive maintenance programs.
7. Increase the overall comfort and productivity of staff.
8. Increase the County's recycling programs in facilities and at the Ada County Landfill.
9. Increase employee involvement in recycling.

Overall Objectives

- Promote and facilitate the Ada County Energy Plan Partnership.
- Ensure that conservation and responsible resource use remains a priority for Ada County.
- Provide administration and oversight to quantify benefits and savings of energy conservation projects at all County facilities.
- Provide data tracking and continuous commissioning associated with the operation and occupancy of all County facilities.
- Provide support and technical assistance to the enterprise funds' staff and facilities within the Solid Waste Management and Parks and Waterways departments.
- Support Idaho's Chapter of the US Green Building Council and provide oversight for all County LEED projects.

Highlights and Major Accomplishments for FY 11-12

1. Building Upgrades and Projects

- ✓ Pod D Expansion Project at the Ada County Jail
 - 88-bed Maximum Security Unit, 14,000 sf
 - Estimated Cost of \$6,000,000
- ✓ Weed, Pest, and Mosquito Abatement Expansion Project
 - Truck Washout and Secure, Open-Air Parking, 15,600 sf
 - Estimated Cost of \$1,126,000
- ✓ Energy Efficient Equipment Installed:
 - Rooftop HVAC units on FACES (2)
 - Rooftop HVAC units on Work Release (2)
 - Make-up air units on Jail Kitchen (2)
 - Water heaters in Jail Pod B (2)
- ✓ Installed Direct Digital Controls on HVAC for Paramedics Administration Building

2. Utilities / Operating Expenses

- ✓ Tracked utility costs and developed new Energy Use Index for 2012
- ✓ Launched Energy Dashboard to track electric and gas use at PSB campus
- ✓ Found billing error Inmate Housing sewer bill **\$SAVINGS: 1,400/YR**
- ✓ New LED Christmas Lights on Courthouse

3. Renewable Energy

- ✓ Landfill Gas to Energy, 3.2 MW capacity **REVENUE: \$270,000/YR**
Generated 22,000,000 kWh @ \$0.012/kWh
- ✓ Barber Dam, 4.1 MW capacity **REVENUE: \$30,000/YR**
Annual lease payment from ENEL
- ✓ Barber Park PV System, 11 KW capacity **\$SAVINGS: \$1,350/YR**
Generated 15,500 kWh @ \$.087/kWh
- ✓ Purchased Green Power for the 2012 Western Idaho Fair,
174 Landfill RECs for 174,000 kWh @ \$7.50 = \$1,305 or \$0.075/kWh

4. Parking / Transportation

- ✓ Parking
 - Environmentally friendly public parking lot at Glenwood Bridge
 - New surface lot at Civic Plaza w/ 55 spaces **REVENUE: \$30,000/YR**
- ✓ FREE Bus service for all County employees **\$SAVINGS: \$12,000/YR**

5. Landfill

- ✓ Constructed scales to weigh material
- ✓ Report GHG emissions to EPA

Goals for FY 12-13

1. Building Upgrades and Projects

- Install Energy Management Controls at Expo Idaho
- Build Sally Port w/ Electronic Gate at Juvenile Court Services
- Remodel Jail Kitchen, bids open April 2013
- New Roofs on Juvenile and Work Release, Spring 2013
- LED lights at PSB campus, Spring/Summer 2013 **\$SAVINGS: \$12,000/YR**
- Upgrade CCU infrastructure for chiller replacement FY 13-14
- Build new Courtroom in Courthouse
 - Requires relocating multiple departments within the Courthouse

2. Utilities / Operating Expenses

- Shredding Contract for all County facilities **\$SAVINGS: \$10,000/YR**
- Kilowatt Crackdown Competition for 400 Benjamin Building
- Energy Dashboard to track electric and gas use at Expo Building

3. Renewable Energy

- Install additional Landfill Gas to Energy engines (2)
- Promote renewable energy tours at Barber Park and Landfill

4. Parking / Transportation

- Host a May in Motion event at the Courthouse on May 1, 2013

5. Landfill

- Design and implement partial closure of Hidden Hollow Landfill
- Install a hydrogen sulfide (H₂S) scrubber to clean the methane gas
- Find solution for Wood Waste
- Convert to weight-based fee structure

ADMINISTRATIVE GOALS

1. **PROMOTE SUSTAINABILITY AND EXPAND ADA COUNTY'S ENERGY PLAN PARTNERSHIP.**
 - Building and operating green buildings promotes responsible use of taxpayer dollars and improves markets for environmentally friendly products and practices.
 - Mentor other organizations to develop energy plans.
 - Proactively promote public image and community sponsorships.
2. **PROMOTE SUSTAINABILITY WITHIN ALL COUNTY DEPARTMENTS.**
 - Meet with all elected officials and department heads to set "green" goals.
 - Educate employees on how to recycle at work.
3. **SERVE THE PUBLIC GOOD.**
 - Facilitate energy code meetings and training classes for state and private sector.
4. **SUPPORT THE US GREEN BUILDING COUNCIL (USGBC) AND LEED PROGRAMS.**
 - Be an advocate for the US Green Building Council.
 - Have LEED Accredited Professional on staff.
 - Support and attend the annual Idaho Energy and Green Building Conference Provide information and case studies about all County LEED projects to the public as requested.
 - Support local USGBC Idaho Chapter programs.
5. **TRACK ADA COUNTY'S ECOLOGICAL FOOTPRINT AND EMISSIONS INVENTORY.**
 - Inventory and monitor greenhouse gas emissions from building energy use, transportation fuel use, and waste generation for emissions inventory.
 - Quantify offsets from alternative transportation, green buildings, LFGTE, and recycling programs.
 - Reduce emissions through green power purchasing.
 - Stay abreast of developments in greenhouse gas reporting requirements.



BUILDINGS AND ENERGY USE

- 1. ENSURE COUNTY BUILDINGS ARE AS ENERGY AND RESOURCE EFFICIENT AS POSSIBLE.**
 - Track monthly consumption and costs of electricity, natural gas, water, sewer, and trash utility bills.
 - Evaluate data and create annual energy reports to document savings.
- 2. CREATE HEALTHY WORK SPACES TO IMPROVE OCCUPANT HEALTH AND COMFORT.**
- 3. PROVIDE MAINTENANCE AND SUPPORT FOR ENTERPRISE FUNDS SUCH AS PARAMEDICS, RECREATION AND EVENT SERVICES, AND SOLID WASTE MANAGEMENT.**
- 4. INCORPORATE ENERGY STAR PROGRAMS INTO ADA COUNTY FACILITIES.**
 - Establish an Energy Use Index for all buildings over 10,000 square feet.
 - Make building operator training available to maintenance staff (Levels I and II).
 - Maintain and update equipment as needed.
 - Recommission buildings as necessary.
 - Manage indoor air quality in all occupied spaces.
 - Conduct low-cost energy audits on all buildings, including after-hours visits and night walks.
 - Evaluate actual lighting needs and choose best lighting solution during renovations.
 - Install/retrofit lighting and HVAC systems with energy efficient options wherever feasible.
 - Install lighting occupancy sensors in select areas.
 - Update HVAC refrigerant when changing out mechanical systems.
 - Benchmark the County's energy usage against other ENERGY STAR facilities.
 - Apply for ENERGY STAR for eligible buildings.
 - Evaluate and incorporate energy conservation measures (ECMs) for all facilities.
 - Apply for utility incentives when applicable.
 - Evaluate ways to reduce peak load in the summer.
- 5. PARTICIPATE IN LOCAL UTILITY INCENTIVE PROGRAMS.**

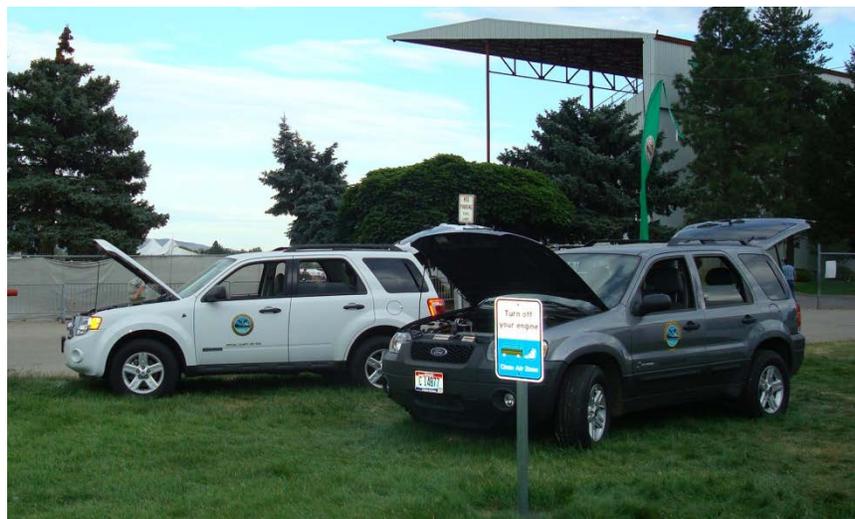


PURCHASING, RECYCLING, AND WASTE MANAGEMENT

1. **IMPLEMENT AN EPP (ENVIRONMENTALLY PREFERABLE PURCHASING) POLICY THROUGHOUT THE ORGANIZATION.**
 - Consider efficiency in the cost analysis equation when making purchasing decisions.
 - Purchase products made with recycled material when practical and feasible.
 - Identify and “advertise” the standard setup of PCs for reduced energy usage.
 - Incorporate PC purchasing standards into EPP program.
 - Reuse and recycle PCs.
 - Find ways to Reduce and Reuse.
 - Provide assistance and recycling incentives for all County-owned facilities.
2. **SUPPORT INFORMATION TECHNOLOGY’S COMPUTER PURCHASING STANDARDS.**
3. **PROMOTE NEW OR ENHANCED RECYCLING PROGRAMS FOR COUNTY-OWNED FACILITIES.**
 - Replace paper shredders with shredding service to reduce waste and increase paper recycling.
 - Provide recycling assistance and incentives.
 - Assist private industry in developing new markets for mulch and chip products.
4. **SUPPORT WOOD RECYCLING PROGRAM AT THE LANDFILL.**
 - Provide information about material reuse programs, for used building materials.
 - Continue incentives to Contractors who source separate the material.
 - Facilitate recycling of gypsum for LEED projects within the County.
5. **DEVELOP CONSTRUCTION WASTE RECYCLING PROGRAM.**
 - Design and build Z-Wall for self-haulers to use.
 - Provide roll-off bins for self-sorting of recyclable material at the landfill.
6. **INCREASE ON-SITE RECYCLING OPPORTUNITIES AT THE LANDFILL.**
 - Measure and verify LFG quality and volumes derived from the LFG collection system.
 - Ensure all contractual obligations of generator to provide documentation of revenue are met.
 - Participate in EPA’s Landfill Methane Outreach Program.
7. **ASSIST WITH PROJECT MANAGEMENT AND EXPANSION OF THE LANDFILL GAS TO ENERGY PROJECT.**

TRANSPORTATION AND FUEL

1. **PROMOTE USE OF ALTERNATIVE TRANSPORTATION FOR COUNTY EMPLOYEES.**
 - Manage alternative transportation program.
 - Track employee incentives.
 - Provide free bus passes to eligible employees.
 - Provide commuter checks to vanpool riders.
 - Promote May in Motion to stimulate regular ridership among employees.
2. **REDUCE EMISSIONS AND FUEL CONSUMPTION FROM COUNTY-OWNED VEHICLES.**
 - Manage downtown employee parking lots.
 - Provide information about options for flex fuel and hybrid vehicles.
 - Increase use of ethanol-blended fuel, 10% minimum.
 - Evaluate using biodiesel fuel, minimum 10% blend.
 - Waste cooking oil from Jail and Expo kitchens is used for making biodiesel.
3. **PROMOTE ALTERNATIVE FUELS INFRASTRUCTURE AND USE OF BIOFUELS.**
 - Participate in the Treasure Valley Clean Cities Coalition.
 - Encourage elected officials and department heads to adopt EPP vehicle policies.
 - Set goal that 50% of new vehicles purchased for the County fleet will be hybrid or flex fuel vehicles.
 - Adopted “No Idling” policy at the Hidden Hollow Landfill to reduce fuel usage and emissions.
4. **IMPLEMENT ENVIRONMENTALLY PREFERABLE PURCHASING (EPP) POLICY FOR VEHICLES.**



COMMUNICATION AND EDUCATION

1. **IMPLEMENT MARKETING / PR PLAN FOR ADA COUNTY'S ENERGY PLANS.**
 - Promote internally to increase awareness among Ada County employees
 - Promote externally via press releases and articles to increase awareness among Ada County residents.
 - Update website with information about Operations Department and County facilities.
 - Use County website and social media to educate about the Energy Conservation Plan. Plan for educational pieces that fit together as an overall package.
 - Identify and catalog materials that are already developed.
 - Provide training for maintenance staff through the Treasure Valley Partnership.
 - Foster energy efficiency awareness by building occupants.
 - Use Earth Day to promote programs; i.e., information booth, short video, etc.
 - Participate in America Recycles Day in November each year.
 - Meet with other Counties, building owners, maintenance staff, etc. to share ideas.
 - Provide tours to county "guests" such as Idaho Association of Cities, NACO, etc.
2. **CREATE A MASTER PLAN FOR AN ENERGY-RELATED EDUCATION PROGRAM**
3. **EDUCATE MAINTENANCE STAFF AND BUILDING OCCUPANTS ON LOW-COST/NO COST ENERGY CONSERVATION MEASURES AND PRACTICES.**
4. **FOSTER PEER EXCHANGE**



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